

# LIFEPAK® 15 MONITOR/DEFIBRILLATOR

## CASE STUDY

### New Features of the LIFEPAK 15 Monitor/Defibrillator Help Save Woman's Life from Unsuspected Cause



Battalion Chief and Medical Officer Mike Cashion, of the Community Fire Protection District in North St. Louis County, Missouri, with the LIFEPAK 15 monitor/defibrillator. Cashion's agency was the first in the state of Missouri to purchase the 15. Within a week of installation, one device helped the team save a 29-year-old woman's life.

Battalion Chief and Medical Officer Mike Cashion likes to see instant gratification when his team implements a new technology. However, he did not expect to see it so soon after they purchased the first two LIFEPAK 15 monitor/defibrillators in the state of Missouri. Within a week after the units were installed, the crew of the Community Fire Protection District, located in North St. Louis County, used one to save a 29-year-old woman's life in an unexpected way.

The woman went to the emergency department (ED) in her local hospital the previous day, presenting with flu-like symptoms. Clinicians diagnosed her with viral syndrome and sent her home with medications. The following day while shopping at Overland Plaza, a mall in Cashion's district, she developed chest pain and shortness of breath. The agency's unit 3827 responded.

"It is our policy that if you use the words chest and pain in your report, you obtain a 12-lead ECG," Cashion said. "The medics wanted to know her oxygen saturation, so they applied the Rainbow sensor." The 15 is equipped with Masimo® Rainbow® Technology, and is the first monitor/defibrillator to integrate noninvasive monitoring for SpO<sub>2</sub> (oxygen saturation of the blood), carbon monoxide (CO) and methemoglobin (to detect chemical exposures and certain drugs).

An alarm sounded and the monitor indicated the patient's CO level was 37 percent (treatment in the hyperbaric chamber is usually recommended at 40 percent) and her methemoglobin level was 3 percent (three times the normal level). "High-flow oxygen didn't wash out the CO very much, so she was treated at the receiving facility with hyperbaric treatment," Cashion said. The patient's husband and child came in to be assessed and were also treated. The utility company later found out a faulty flue on the family's hot water heater caused the problem. "The LIFEPAK 15 device did its job," Cashion said. "A case of one sick person ended up saving a family."

**"The LIFEPAK 15 device did its job. A case of one sick person ended up saving a family."**

— Mike Cashion  
Battalion Chief and Medical Officer  
Community Fire Protection District Missouri

This story has several ironic twists. "You suspect CO poisoning if a CO monitoring alarm goes off or if others in the household are also affected," Cashion said. In this case, neither one occurred. Also, the woman was not a citizen of the agency's district: Overland Plaza is located outside her community. Her local EMS service and hospital do not yet have this new technology. Had she been at home or back in the hospital when her condition worsened, the correct diagnosis could have been missed or seriously delayed. For this reason, Cashion believes more hospital emergency departments will soon want to have LIFEPAK 15 monitor/defibrillators onboard.

"It's key to be proactive," Cashion said. "We decided, 'let's get it [the 15] first.' A possible lethal condition was found and corrected with no long-term effects."

The Community Fire Protection District is located in North St. Louis County, Missouri, just outside St. Louis. The agency provides fire and EMS services to more than 50,000 people living in 12.3 square miles. The team includes 58 dual-trained fire/EMS personnel. Chief Cashion has worked on staff since 1979.

**For further information, please contact your local Physio-Control representative or visit our website at [www.physio-control.com](http://www.physio-control.com)**

Statements attributed to individuals in this case study reflect the opinion of the individual and do not necessarily reflect the opinions of Physio-Control. For information about specific product claims and labeling, refer to the device operating instructions.



**HEADQUARTERS / MANUFACTURING**

**Physio-Control, Inc.**  
11811 Willows Road NE  
Redmond, WA 98052 USA  
Tel 425 867 4000  
Toll Free 800 442 1142

©2009 Physio-Control, Inc. All rights reserved. Masimo, the Radical logo, Rainbow and SET are registered trademarks of Masimo Corporation. Printed in USA.

GDR 3304953\_A

